

In the Specification

Please substitute the following pages 29 through 60 with the attached pages 29 through 66.

Table 1. Differentially expressed genes in LGL1 and LGL2. This data is based on Incyte Genomics and Affymetrix Chip FL 6800

| Gene Name | Incyte Genomics | | Affymetrix | |
|---|-----------------|--|--------------------------|--|
| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| Upregulated Genes | | | | |
| <i>Proteolytic enzymes</i> | | | | |
| Granzyme H precursor | 6.3 (3332/533) | M57888 NM033423 BC027974 | (1.5/1.8) (21.8/10.8) | M37245 M28879 |
| Lymphopain (Cathepsin <u>Cathapsin W</u>) | 5.4 (3578/658) | AF013661 NM001335 BC035637 BC048255 | _____ | |
| Perforin | 3.8 (1549/413) | L40557 BC063043 X13224 X12940 M28393 | (103-44.7) | M31951 |
| Matrix metalloprotease <u>metalloprotenase 8</u> (neutrophil collagenase) | 3.2 (1178/370) | J05556 NM002424 | (1.0/-1.1) | |
| Calpain, small polypeptide | 2.0 (4089/2059) | X04106 BC064998 BC023643 BC017308 NM001749 BC018931 BC000592 BC011903 BC007779 BC021933 BT009775 NM032330 BC006000 BC005397 AY052551 | (1.1/1.3) | |

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| Granzyme A | 1.9 (1944/1022) | NM06144 BC015739 | ————— | |
| Caspase 8 (From RPA also) | 1.4 (2035/1480) | U97075 NM033357 NM033358 | (1.2/-1.4) | AF005775 |
| | | | | |
| <i>Inducible or regulated proteins</i> | | | | |
| Interferon regulated factor 4 | 5.0 (1128/226) | U52682 | (6/-1.5) | |
| TNF- α induced protein A 20 | 3.2 (1507/470) | M59465 | (-1.3/-3.8) | |
| Heat shock 70 let kd protein 5 (Glucose regulated protein 78 kd) | 2.8 (4090/1464) | X87949 | (5.3/14.5) | M11717 |
| RANTES (RPA also) | 2.7 (2490/909) | M21121 | (5.9/6) | |
| Human rap 2 mRNA for ras related protein proteins | 2.6 (899/327) | X12534 | ————— | |
| p53 inducible proteins | 2.2 (2040/916) | L47738 | (2.9/2.3) | |
| Glucose regulated proteins 58 kd receptors | 2.2 (3661/1641) | AL043206 | ————— | |
| | | | | |
| RECEPTORS | | | | |
| CD8 antigen, alpha polypeptide (p32) | 7.3 (4325/594) | M12824 | (-1.2/-1.1) | M27161 |

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| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| Killer cell lectin-like receptor subfamily C, member 2 (NKG2-CII) | 5.5 (2115/383) | AJ001684 | | |
| CD8 antigen beta polypeptide (p37) | 9.0 (1953/401) | NM004931 | (7.2/5.2) | X13444 |
| Musculin (activated B-cell factor-1) | 4.1 (466/113) | AF087036 | | |
| Killer cell lectin-like receptor subfamily C, member 3 (NKG2-CII) | 3.8 (1335/344) | AJ001685 | | |
| subfamily C, member 2 (NKG2-CII) | 5.5 (2115/383) | AJ001684 | | |
| CD8 antigen beta polypeptide (p37) | 4.9 (1953/401) | X13444 | (7.2/5.2) | |
| Musculin (activated B-cell factor-1) Killer cell lectin-like receptor | 4.1 (466/113) | AF060154 | | |
| Low affinity immunoglobulin Gamma FC receptor III-1 precursor | 3.9 (1335/344) | J04162 | (8.1/6.8) | |
| Filamin I (actin-binding protein-280) | 3.8 (1085/287) | X53416 | (2.1/1.9) | |

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| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| Lectin-like Type II integral Membrane protein (NKG2-E) | 3.8 (1300/344) | AJ001685 | | |
| Natural Killer cells group 7 | 3.1 (11251/3591) | S69115 | (9.3/9.1) | |
| Protein tyrosine phosphatase type J receptor | 2.1 (4614/2177) | L05148 | (2.9/2.6) | |
| Delta sleep inducing peptide Immunoreceptor | 2.3 (5424/2319) | BE295817 | | |
| Lymphotoxin-Beta receptor precursor | 2.3 (3587/1544) | AI271415 | | |
| MHC class II, DR beta 5 receptor | 2.4 (2264/953) | X00700 | | |
| NKG2-D type II integral membrane protein | 2.1 (1019/494) | X54870 | (7.3/9.4) | |
| Protein tyrosine phosphatase Non-receptor type 12 | 2.1 (1036/494) | M93425 | (1.6/1.0) | |
| Leukemia virus receptor (CGLVR1) | 2.1 (713/340) | L20859 | (2.9/2.5) | |
| | | | | |

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| Gene Name | Incyte Genomics | | Affymetrix | |
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| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| <i>Kinases and Phosphatases</i> | | | | |
| Dual specificity Phosphatase-1 (PAC-1) | 4.2 (2484/585) | L11329 | (1.6/1.2) | |
| Dual specificity Phosphatase-5 | 2.7 (857/320) | U10886 | (1.1/1.6) | |
| Tyrosine protein tyrosine phosphatase | 2.6 (713/272) | U15932 | (1.2/2.3) | |
| Protein Kinase C etc | 2.2 (2780/1239) | M55284 | ————— | |
| Zeta Chain (TCR) associated protein kinase (70kd) | 2.1 (4614/2177) | L05148 | (2.9/2.6) | |
| Src Kinase-associated phosphoprotein of 55kd | 2.1 (730/327) | Y11215 | (3.3/2.4) | |
| Phosphatidyl inositol (4,5,bisphosphatase5-phosphatase homolog | 2.1 (764/372) | 638789 | ————— | |
| Protein phosphatase 2. Regulated subunit B (B56) | 2.0 (1071/526) | U37352 | (6.8/5.8) | |
| Protein Phosphatase 1, (catalytic subunit, alpha isoform) | 2.0 (1643/835) | J04759 | | |
| | | | | |

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| Gene Name | Incyte Genomics | | Affymetrix | |
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| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| <i>Transcription Factors</i> | | | | |
| Runt related transcription factors 3 | 3.5 (2689/775) | D43968 | (3.8/3.5) | |
| | | | | |
| <i>Miscellaneous</i> | | | | |
| EST.1 | 17.7 (346/189) | H06366 | | |
| EST.2 | 11.8 (2571/218) | AA482549 | | |
| EST.3 | 3.0 (544/182) | N47089 | | |
| Solute carrier protein | 4.6 (785/172) | L14595 | (1.4/1.6) | |
| Filamin A alpha | 3.8 (1085/287) | X53416 | (2.1/1.9) | |
| Hemoglobin delta | 3.1 (2084/667) | V00505 | | |
| Hemoglobin beta | 3.0 (4319/1419) | V00497 | | |
| KIAA 0668 protein | 2.6 (3476/1254) | AB014568 | | |
| MHC, Class II DR beta 3 | 2.4 (2264/953) | X00700 | | |
| PLECKSTRIN | 2.4 (2033/854) | X07743 | (2.0/2.4) | |
| Isocitrate dehydrogenase 2 (NADP+) Mitochondrial | 2.2 (2067/893) | X69433 | (2.2/2.7) | |
| Putative translation initiation factor | 2.0 (4003/2046) | L26247 | (-1.3/-1.5) | |

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|--|-----------------|-----------|-------------------------|--|
| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| Tubulin, Beta polypeptide | 2.0 (2640/1349) | AW163523 | | |
| Ubiquitin B | 1.9 (5668/3024) | BE250544 | | |
| Moesin | 1.8 (5015/2750) | Z98946 | | |
| Nuclear factor of activated T cells, cytoplasmic | 1.8 (2586/1440) | U85430 | (1.8/2.9) | |
| Ubiquitin C | 1.7 (3568/2071) | AA600188 | | |
| GTP binding protein, alpha 13 | 1.8 (2147/1195) | U87964 | (-1.3/-1.5) | |
| Calritculin Calritculin Precursor | 2.2 (3101/1384) | M84739 | (2.0/2.2) | |
| KIAA0158 gene complete CDs | 3.9 (2953/753) | 063878 | | |
| Hemoglobin alpha I | 3.2 (1074/333) | V00491 | | |
| T cell receptor gamma chain | 3.1 (987/315) | M30894 | (5.0/11.3) | |
| FYN Oncogene related to SRC FGR, YES | 3.x (3405/313) | Z97989 | | |
| EB1 mRNA | 2.4 (1075/442) | U24166 | (-1.8/-2) | |
| PLECKSTRIN | 2.4 (2033/854) | X07743 | | |

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| Gene Name | Incyte Genomics | | Affymetrix | |
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| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| DNAJ protein Homolog | 2.4 (237/1065) | D85429 | (1.4/-1.7) | |
| MHC Class II HLA-DRW 10 beta | 2.4 (2264/953) | D85429 | | |
| Lymphotoxin-beta receptor precursor | 2.3 (3587/1544) | L04270 | | |
| Leucine Zipper Protein | 2.3 (5424/2319) | 50781 <u>Z50781</u> | (1.4/-2.7) | |
| Probable protein disulfide Isomerase ER-60 precursor | 2.2 (3661/1641) | Z49835 | (1.4/1.0) | |
| Troponin T, Fast skeletal muscle Isomerase beta | 2.2 (1628/743) | M21984 | | |
| Transforming growth factor receptor III | 3.7 (764/204) | L07594 | (10.6/7.1) | |
| DEC1, complete cds | 3.5 (1498/1429) | AB004066 | | |
| Granulocyte Colony-stimulating Factor induced gene | 3.1 (11251/3591) | S65115 | (9.3/9.1) | |
| Integrin, beta 2 | 2.7 (3718/1377) | M15395 | | |
| Clone 23912 | 2.6 (3476/1341) | AF038178 | | |
| Putative tumor suppressor Protein (RDA32) | 2.5 (1145/453) | AF061836 | | |

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| Gene Name | Incyte Genomics | | Affymetrix | |
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| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| Down regulated genes | | | | |
| Homo sapiens Indian hedgehog protein (IHH) | -18.6 (477/7779) | L38517 | (-1.6/-1.1) | |
| CD20 Receptor | -16.2 (229/3703) | X07203 | (1.1/-1.9) | |
| Human germline IgD chain gene, C-region | -11.0 (210/2313) | K02882 | (-9.5/-7.5) | |
| Human transporter Protein (g17) | -10.4 (300/3124) | U49082 | (-2/-1) | |
| Ribosomal protein S26 | -6.2 (321/1853) | X69654 | (-3.1/1.1) | |
| EST | -3.4 (429/1371) | R85437 | | |
| CD 72 antigen | -3.3 (353/1165) | M54992 | (1.3/1.7) | |
| EST | -2.5 (629/1583) | AA916867 | | |
| Endothelial differentiation protein (Edg-1) | -2.5 (447/1033) | M31210 | (-2.6/-5.2) | |
| Diacylglycerol kinase, alpha (80kD) | -2.5 (883/2172) | X62535 | (-1.4/-2.3) | |
| 60S Ribosomal protein L41 | -2.3 (5372/2339) | Z12962 | (-1.2/-1.2) | |

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| Gene Name | Incyte Genomics | | Affymetrix | |
|-----------|-----------------|-----------|-------------------------|--|
| | BDE (p1/p2) | GenBankID | Fold Change (LGL1/LGL2) | GenBank ID If different from Incyte Genomics |
| EST | -2.3 (708/1616) | AA134589 | | |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|--|-----------------------------------|---|--------------------------------|---------|------|
| | | (Fold increase compared to Normal PBMC) | | | |
| perforin | 32904_at | 72.8 | 39.5 | 45.4 | 8.5 |
| serine protease | 40078_at | 55.7 | 48.7 | 38.7 | 3.0 |
| mast cell function-associated antigen homolog (MAFA) | 34975_at | 66.2 <u>55.2</u> | 45.4 | 61.1 | 16.2 |
| NK-receptor (NK-p46) | 34039_at | 53.6 | 45.2 | 50.6 | 7.8 |
| gb=W28589 | 40913_at | 47.7 | 41.2 | 44.2 | 23.9 |
| suppressor related (DOC-1R) | 35151_at | 45.3 | 40.1 | 27.0 | 42.8 |
| ribosomal protein S6 kinase 1 (RPS6KA1) | 1127_at | 42.4 | 40.0 | 50.6 | 2.2 |
| butyrophillin (BT3.3) | 38759_at | 37.8 | 33.3 | 52.9 | 17.8 |
| CD94 | 33531_at | 35.2 | 34.2 | 17.9 | 7.3 |
| MEGF9 | 36488_at | 34.1 | 44.8 <u>44.6</u> | 33.4 | 10.3 |
| chronic granulomatous disease protein | 40159_r_at | 33.7 | 83.5 | 63.5 | 8.8 |
| gamma2-adaptin (G2AD) | 38799_at | 30.3 | 29.2 | 27.5 | 40.5 |
| calcineurin A2 | 39780_at | 29.0 | 17.4 | 15.2 | 19.0 |
| beta adaptin | 35181 <u>36161</u> _at | 26.4 <u>28.4</u> | 21.1 | 11.5 | 26.7 |
| G protein-coupled receptor V28 | 40646_at | 27.4 | 40.3 | 25.1 | 5.1 |
| thrombin receptor | 41700_at | 22.5 | 8.3 | 14.2 | 4.8 |
| GTPase-activating protein | 36846 <u>36843</u> _at | 22.1 | 9.1 | 19.5 | 12.2 |
| SH3 domain containing adaptor protein (SCAP(SCAP)) | 34432_at | 21.9 | 10.4 | 22.8 | 10.3 |
| AML1c | 39421_at | 21.5 <u>21.8</u> | 17.2 | 31.7 | 10.6 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|--|---------------------------|---|------|---------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| KIAA0664 protein | 34259_at | 21.7 | 38.4 | 27.0 | 18.0 |
| gb=AA978353 | 41126_at | 21.4 | 8.8 | 13.9 | 1.4 |
| Metk Matk=megakaryocyte-associated tyrosine kinase | 36264_at | 20.7 | 17.1 | 13.1 | 1.4 |
| vascular smeth-smooth muscle alpha-actin | 32755_at | 20.1 | 27.8 | 22.0 | 3.8 |
| lysyl hydroxylase (PLOD) | 36184_at | 19.8 | 18.0 | 9.8 | 1.1 |
| candidate tumor suppressor gene 21 protein isoform 41 | 40497_at | 19.7 | 16.1 | 26.6 | 13.1 |
| beta2-syntrophin (SNT B2) | 40589_at | 19.2 | 22.3 | 22.1 | 13.1 |
| hexokinase III (HK3) | 38372 36372_at | 18.8 | 39.6 | 4.1 | 6.7 |
| telomeric repeat DNA-binding protein (PIN2) | 1329_s_at | 17.3 | 12.9 | 14.3 | 13.8 |
| cytotoxic T-lymphocyte-associated serine esterase 1 (CTLA1) | 32370_at | 17.3 | 12.1 | 9.8 | 1.6 |
| T cell-specific cell-specific protein (RANTES) | 1404_r_at | 17 | 10.2 | 18.3 | 4.5 |
| CMRF-35-H9 | 41059_at | 16.8 | 21.0 | 15.6 | 5.7 |
| human-Human human immune interferon (IFN-gamma) | 1021_at | 16.7 | 21.7 | 18.8 | -2.1 |
| placenta (Diff48) | 32978_g_at | 16.5 | 14.4 | 6.9 | 23.7 |
| medium-chain acyl-CoA dehydrogenase (MCAD) | 37532_at | 16.4 | 15.1 | 18.6 | 28.3 |
| mRNA for Y3K1 YSK1 | 40104_at | 16.3 | 12.5 | 13.2 | 19.1 |
| m3A-m6A methyltransferase (MT-A70) | 32245_at | 16.2 | 16.4 | 19.8 | 27.4 |
| CD3G gene, exon 1 | 39228 39226_at | 16.2 | 6 | 5.3 | 3.4 |
| PUTATIVE-PUTATIVE novel protein similar to many (archae archae)bacterial, worm and yeasy-yeast hypothetical proteins | 41249_at | 15.6 15.8 | 27.6 | 27.5 | 8.2 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|--|---------------------------------|---|------|-----------------------------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=A1004207 <u>A1004207</u> | 36732_at | 15.8 | 25.1 | 17.6 | 22.2 |
| microsomal glutathione glutathione S-transferase (3- MGST3)3-(MGST3) | 39018_at | 15.6 | 21.8 | 16.9 | 28.4 |
| similar to mouse-mouse Choline/Ethanolamine Ethanolamine Kinase (O55229) | 32033_at | 15.6 | 14.4 | 13.5 <u>13.6</u> | 25.3 |
| 25S-26S proteasome subunit p40.5 | 32211_at | 15.3 | 15.2 | 11.7 | 12.7 |
| FeFc -gamma RIII-1 | 31499-at <u>s_at</u> | 15 | 5.8 | 5.4 | -4.1 |
| gb=AF070644 | 3885238652 at | 14.6 | 16.6 | 14.4 | 8.4 |
| gb=U79260 | 37242_at | 14.5 | 15.9 | 11.5 | 17.5 |
| Ste=20 related kinase SPAK | 40986_at | 14.5 | 10.9 | 18.2 | 8.2 |
| guanine Guanine Nucleotide-Binding Protein Rap2 | 1819_at | 14.5 | 5.8 | 6.5 | 4.1 |
| SCA1 mRNA for ataxin | 3814236142 at | 14.2 | 13.2 | 16.9 | 7.7 |
| butyrophillin <u>butyrophilin</u> (BTF4) | 38760-at <u>f_at</u> | 14.2 | 13.3 | 18.7 | 7.1 |
| HBV associate <u>associated</u> factor (XAP4) | 32202_at | 14.0 | 16.2 | 10.9 | 12.5 |
| leukocystatin | 3495534965 at | 13.9 | 8.2 | 12.1 | 2.6 |
| vav oncogene | 1919_at | 13.9 | 15.6 | 19.2 | 3.5 |
| beta-2-adrenergic receptor | 610_at | 13.9 | 9.1 | 15.9 | 3.6 |
| DNA from chromosome 19p13.2 <u>cosmids</u> R31240, R30272 and R26549 <u>R28549</u> <u>containing</u> the EKLF, GCDH, CRTC, and RAD23A genes | 1751_g_at | 13.9 | 17.2 | 10.9 | 23.2 |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|---|----------------------------|---|------|----------------------|------|
| | | (Fold increase compared to Normal PBMC) | | | |
| DNA sequence from PAC 56H14-66H14 on chromosome 6q21-22. Contains FYN (P59-FYN, SYN, SLK) gene coding for two isoforms | 40479_at | 13.4 | 11.0 | 16.4 | 13.5 |
| transcription factor LSF | 40084_at | 13.3 | 12.3 | 11.3 | 11.7 |
| rap2 | 41318_g_at | 13.2 | 3.3 | 5.9 | 2.8 |
| activation (Act-2) | 36674_at | 12.8 | 7.1 | 12 | -1.1 |
| pM5 | 33414_at | 12.8 | 10.2 | 8.8 | 8.2 |
| CGAAT CCAAT transcription binding factor subunit gamma | 404884 40466_at | 12.8 | 18.3 | 18.7 16.7 | 14.6 |
| CD4-related protein involved in lymphoma lymphocyte activation | 36776_at | 12.8 | 23.0 | 27.0 | 5.0 |
| SYT Interacting interacting protein SIP | 41460_at | 12.7 | 10.7 | 10.3 | 15.7 |
| MHC class I | 34934_at | 12.6 | 13.9 | 18.2 | 21.2 |
| DNA dependent ATPase and helicase (ATRX) | 818_s_at | 12.6 | 7.4 | 13.3 | 10.0 |
| bruton Brutons tyrosine kinase (BTK), alpha-D-galactosidase-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) | 36833_at | 12.6 | 6.8 | 4 | 3.9 |
| Natural natural killer cell BY55 | 33112_at | 12.6 | 15.9 | 10 | -2.2 |
| leukocyte IgG receptor (Fc-gamma-R) | 37200_at | 12.5 | 9.8 | 9.7 | -2 |
| KIAA0080 gene | 36144_at | 12.4 | 14.3 | 11.8 | 3.0 |
| tax1-binding protein TXBP181 | 499_at | 12.4 | 11.1 | 17.0 | 6.6 |
| gb=A1652860 A1652660 | 41590_at | 12.3 | 6.3 | 9.7 | 11.3 |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|--|---------------------|---|-------------------------|---------------------|----------------------|
| | | (Fold increase compared to Normal PBMC) | | | |
| C-terminal binding protein 2 | 40780_at | 12.1 | 5.5 0.7 | 5.5 | 1.1 |
| NuMA | 33822_at | 11.9 | 19.8 11.3 | 9.8 19.8 | 25.0 |
| | 160043_at | 11.9 | 13.1 6.7 | 3.1 | 4.2 |
| lymphoma proprotein convertase (LPC) | 34361_at | 11.7 | 11.7 11.4 | 11.7 | 11.7 11.1 |
| RGP3 | 37637_at | 11.4 | 9.9 2 | 9.9 | 3 |
| gb=W26655 | 39045_at | 11.3 | 11.7 5.6 | 11.7 | 6.2 |
| KIAA0064 KIAA0226 gene | 31802_at | 11.3 | 3.8 2.4 | 3.8 | 17 |
| KIAA0064 gene | 37654_at | 11.2 | 11.3 15.8 | 11.3 | 9.9 |
| G9a | 36200_at | 11.1 | 11.0 9.1 | 11.0 | 6.7 |
| Human transforming growth factor-beta type III receptor (TGF-beta) | 1897_at | 11.1 | 97.6 | 9 | 4.3 |
| guanylate binding protein isoform 1 (GBP-2) | 35735_at | 11.1 | 29.5 23.8 | 29.5 | 6 |
| KIAA0199 gene | 37656_at | 11.0 | 14.6 10.4 | 14.6 | 15.0 |
| gb=AA194159 | 41282-a-at_s _at | 10.9 | 10.7 11.3 | 10.7 | 17.7 |

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|--|-----------------------------|---|-------------------------|---------|------|
| | | (Fold increase compared to Normal PBMC) | | | |
| carnitine palmitoyltransferase I type II | 35936_g_at | 10.9 | 11.8 9.1 | 11.8 | 8.8 |
| carnitine palmitoyltransferase I type I | 35228_at | 10.8 | 14.3 11.1 | 14.3 | 7.9 |
| Daxx | 4115141161 at | 10.8 | 15.4 10.7 | 15.4 | 13.7 |
| B-ATF | 39942_at | 10.7 | 10.4 12 | 10.4 | 2.4 |
| AUH | 37616_at | 10.7 | 16.0 8.6 | 16.0 | 10.5 |
| (TAF1170TAF1170-alpha) | 37271_at | 10.7 | 8.66 9 | 8.6 | 11.1 |
| serine protease-like protein | 37137_at | 10.6 | 6.25 8 | 6.2 | 1.2 |
| T-cell receptor T1-Ti rearranged gamma-chain mRNA V-J-C region | 41468_at | 10.6 | 19 | 25.1 | 9.7 |
| PEST phosphatase interacting protein homolog (H-PIP) | 34914_at | 10.6 | 8.1 | 8.3 | 8.2 |
| KIAA0808 protein | 33316_at | 10.3 | 4.8 | 5.6 | 1.5 |
| Nuclear-nuclear protein, NP220 | 32674_at | 10.3 | 7.5 | 12.1 | 15.3 |
| beta-galactoside-galactoside alpha-2,6-sialyltransferase | 41352_at | 10.2 | 8.9 | 6.1 | 13.8 |
| HREV107-like protein | 35704_at | 10 | 8.9 | 5.4 | -1.6 |
| adenylyl cyclase-cyclase type IX | 33800_at | 9.9 | 8.4 | 8.1 | 4.3 |
| guanine nucleotide exchange factor mss4 | 38264_at | 9.9 | 9.3 | 11.4 | 12.9 |
| fibrinogen-like protein (pT49 protein) | 39591_s_at | 9.9 | 14 | 12.1 | -3.1 |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|--|---------------------------------------|---|----------------------|---------|------|
| | | (Fold increase compared to Normal PBMC) | | | |
| XAP-5 | 36599 <u>38599</u> s_at | 9.8 | 9.5 | 12.2 | 10.1 |
| DNA from chromosome 19p13.2 cosmids R31240, R30272 and R23549 <u>R28549</u> containing the EKLF, GCDH, CRTC, and RAD23A genes | 1750_at | 9.7 | 10.4 | 12.0 | 14.8 |
| guanine nucleotide exchange factor | 33280 <u>33260</u> at | 9.6 | 6.9 | 6.2 | 4.7 |
| DEAD-box protein p72 (P72) | 41260_at | 9.4 | 14.0 | 87.2 | 23.5 |
| calcium/calmodulin-dependent protein kinase II | 32105_f_at | 9.4 | 7.3 | 10.3 | 7.2 |
| IFN-gamma | 40702_at | 9.3 | 11.7 | 9.4 | -2.8 |
| IL-17 | 36229_at | 9.3 | 19.1 | 4.6 | 25.5 |
| KIAA0122 gene | 40070_at | 9.3 | 4.1 | 10.4 | 5 |
| NKG2D gene, exons 2-5 | 36777_at | 9.3 | 8.7 | 8 | 12.6 |
| alanyl-tRNA synthetase | 36185_at | 9.2 | 12.1 | 15.8 | 25.5 |
| gb=AL080203 | 40451_at | 9.1 | 13.2 | 10.2 | 11.5 |
| gb=AA524058 | 34359_at | 9 | 6.1 | 4.6 | 7.6 |
| P-glycoprotein (PGY1) | 1576_g_at | 9.0 | 8.6 | 18.1 | 14.9 |
| bcl-xL | 34742_at | 8.9 | 6.6 | 3.4 | 7.3 |
| putative dienoyl <u>dienoyl</u> -CoA isomerase (ECH1) gene | 32756_at | 8.9 | 12 | 11.8 | 10.9 |
| KIAA0245 KIAA0248 gene | 40123_at | 8.9 | 5.4 | 4.8 | 4.3 |
| gb=AF070533 | 41744_at | 8.8 | 7.8 | 7.7 | 8.7 |
| alpha-2,3-sialyltransferase sialyltransferase (SIAT4A) | 40290_f_at | 8.8 | 7.7 | 10.2 | 10.2 |
| ADP-ribosylation factor | 36193_at | 8.8 | 9/19 1 | 9.1 | 11.7 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|--|---------------|---|-------------------------|---------|--------------------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=AI540958 | 34891_at | 8.8 | 12.6 | 10.1 | 8.4 |
| oligo A synthetase E | 38388_at | 8.8 | 7.8 | 16.8 | 1.2 |
| gb=AA631972 | 39119_s_at | 8.7 | 9.8 | 7.1 | 4.5 |
| pyruvate dehydrogenase (EC 1.2.4.1) beta subunit | 39160_at | 8.7 | 4 | 6.2 | 6.2 |
| gb=A1432401A1432401 | 39593_at | 8.7 | 19.2 19.3 | 20.2 | -6.9 |
| gb=U51712 | 39698_at | 8.6 | 9.6 | 3.3 | 3.9 |
| glucocerebrosidase glucocerebrosidase (GCB) | 32632_g_at | 8.6 | 10.3 | 8.3 | 7.5 |
| T cell-specific protein (RANTES) | 1405_1_at | 8.6 | 8.1 | 9.4 | 4.9 |
| aminoacylase aminoacylase-1 (ACY1) | 37713_at | 8.6 | 9.0 | 5.6 | 9.7 |
| multidrug resistance protein 5 (MRP5) | 1933_g_at | 8.4 | 9.4 | 5.4 | 3.4 |
| gb=AL050259 | 40521_at | 8.2 | 7.3 | 10.7 | 7.5 |
| carboxyl methyltransferase | 37736_at | 8.2 | 9.6 | 6.4 | 10.1 |
| gb=AA176780 | 40485_at | 8.2 | 15.9 | 10.2 | 21.7 |
| KIAA0955 protein | 41100_at | 8.2 | 8.1 | 11.1 | 10.8 |
| gb=AL079277 | 41710_at | 8.1 | 7.7 | 3.1 | -1.7 |
| KIAA0129 gene | 33253_at | 8.1 | 11.1 | 7.4 | 10.6 |
| gb=AA16987AA156987 | 39162_at | 8.0 | 11.1 | 7.3 | 14.8 |
| testis testis-specific cAMP-dependent protein kinase catalytic subunit (C-beta isoform) | 36215_at | 7.9 | 5.1 | 5.9 | 7.3 |
| KIAA0898 KIAA0898 protein | 33107_at | 7.8 | 4.5 | 7.9 | 6.1 8.1 |
| tactile protein | 34961_at | 7.8 | 8.5 | 5.4 | 28.1 |
| 3-alkyladenine DNA glycosylase (HAAG) | 37768_at | 7.8 | 6.3 | 8.7 | 9.8 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|---------------------------|---|----------------------|----------------------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| helicase-like protein (HLP) | 37998_at | 7.8 | 9.0 | 9.2 | 11.8 |
| 17-beta-hydroxysteroid dehydrogenase | 36626_at | 7.8 | 8.8 | 38.2 | 7.9 |
| gb=AF035282 | 41679_at | 7.7 | 6.75 7 | 6.8 | 3.8 |
| beta2-chimaerin | 33244_at | 7.6 | 7.2 | 4.6 | -1.5 |
| Butyrophillin butyrophilin (BTF3) | 38241_at | 7.6 | 6.2 | 8.8 | 4.2 |
| Protein-protein kinase C-theta (PRKCT) | 38949_at | 7.6 | 6.15 1 | 8.8 | 7.5 |
| homolog of yeast mutL (hPMS1) gene | 525_g_at | 7.5 | 8.96 9 | 9.0 | 9.1 |
| heat shock protein (hsp 70) | 1104_s_at | 7.5 | 19.3 | 13.1 | 8.4 |
| receptor protein 4-1BB | 31540_at | 7.5 | 7.4 | 6.78 7 | -1.2 |
| fibrinogen-like protein (pT49 protein) | 39592_at_r_at | 7.4 | 8.4 | 7.0 | -1.6 |
| RLIP76 | 36626_at | 7.4 | 8.2 | 8.6 | 11.6 |
| copper chaperone for superoxide superoxide dismutase (CCS) | 38088 36068_at | 7.3 | 7.8 | 10.5 | 9.3 |
| TAR RNA binding protein 2 (TRBP2) | 35657_at | 7.3 | 7.3 | 5.5 | 7.3 |
| N-myristoyltransferase N-myristoyltransferase 1 | 39000_at | 7.3 | 10.0 | 10.0 | 13.8 |
| gb=AA126515 | 41172_at | 7.3 | 5.4 | 8.8 | 8.9 |
| gb=W27519 | 32326_at | 7.3 | 65 | 6.9 | 9.1 |
| synaptogyrin 3 | 40314_at | 7.2 | 7.4 | 9.7 | 3.4 |
| gb=A1852521A1862521 | 39743_at | 7.2 | 4.7 | 4.7 | 5.5 |
| Human replication protein A | 1382_at | 7.2 | 4.0 | 4.8 | 6.9 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|------------------------------|---|----------------------|---------|-------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| puromycin sensitive aminopeptidase | 39431_at | 7.2 | 5.2 | 15.4 | 9.9 |
| gb=A1014538A1014538 | 38623_at | 7.2 | 7.9 | 7.2 | 9.9 |
| gb=AF055004 | 34831_at | 7.2 | 8.56 5 | 6.9 | 3.6 |
| Endothelial Cell Growth Factor 1 | 1665_s_at | 7.2 | 28.7 | 32.9 | -11.3 |
| gb=AL040137 | 41807_at | 7.2 | 7.3 | 8.7 | 4.1 |
| gb=AF007155 | 40472_at | 7.1 | 6.6 | 6.9 | 6.7 |
| lymphoid phosphatase LyP1 | 38808 36808 at | 7.1 | 3.1 | 5.6 | 2.7 |
| Hanukah factor serine protease (HuHF) | 40757_at | 7.1 | 6.1 | 4.6 | 1.3 |
| TM7XN1 | 35789_at | 7.1 | 5 | 5.4 | 1.1 |
| gb=AB011133 | 33223_at | 7 | 6.1 | 4.9 | 2 |
| cyclin-dependent kinase 4 (CDK4) | 1942_s_at | 7.0 | 7.5 | 5.4 | 10.2 |
| WD repeat protein HAN11 | 38171_at | 7.0 | 4.0 | 3.5 | 2.7 |
| T cell-specific protein (RANTES) | 1403_s_at | 7 | 5.7 | 6.8 | 3.4 |
| KIAA0067 gene | 34158 34189 at | 7.0 | 7.07 9 | 11.8 | 10.4 |
| gb=AI670100 | 34724_at | 7.0 | 7.9 | 6.5 | 5.2 |
| BRCA1, Rho7 and vat1 genes, complete cds, and lpl35 -ipf35 gene | 626_s_at | 6.9 | 13.4 | 8.2 | 1.9 |
| gb=H68340 | 41446_f_at | 6.9 | 7.2 | 13 | 3.3 |
| RasGAP-related protein (IQGAP2) | 37278 37276 at | 6.9 | 4 | 8.1 | 2.7 |
| RBP2-retinoblastoma binding protein 2 | 36999_at | 6.9 | 8.5 | 13.3 | 15.9 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|---------------------------|---|------|---------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| KIAA0102 gene | 37359_at | 6.8 | 5.8 | 3.7 | 4.8 |
| gb=AL050060 | 35840_at | 6.8 | 17 | 5.9 | 4.5 |
| <u>Elk2clk2</u> | 646_s_at | 6.8 | 9.5 | 11.5 | 13.8 |
| gb=AL048308 | 32768_at | 6.7 | 5.3 | 7.1 | 5.2 |
| gb=AA877795 | 33854_at | 6.7 | 7.3 | 9.2 | 5.7 |
| KIAA1062 protein | 38313_at | 6.7 | 3.1 | 3.5 | 1.1 |
| a-glucosidase 4I | 38464_at | 6.7 | 6 | 6.9 | 9.9 |
| retinoblastoma | 40418_at | 6.7 | 6.8 | 5.1 | 5.2 |
| gb=AF026402 | 40485 40465_at | 6.7 | 8.2 | 8.9 | 8.3 |
| metase (MET-1) | 32264_at | 6.7 | 4.4 | 3.1 | 1.2 |
| axin (AXIN) | 33319_at | 6.6 | 6.3 | 4 | 4.2 |
| adenylate kinase (AK1) | 35997 36997_at | 6.6 | 4.8 | 10.9 | 5.7 |
| cbl-b | 514_at | 6.6 | 5.4 | 11.4 | 13.6 |
| T-cell differentiation antigen Leu-2/T8 | 40599 40699_at | 6.6 | 5.6 | 4.8 | 4.1 |
| gb=W26892W28892 | 33850_at | 6.5 | 7.8 | 6.5 | 8.9 |
| mBA-m6A methyltransferase (MT-A70) | 32246_g_at | 6.5 | 6.7 | 8.5 | 13 |
| 1,4-alpha-glucan branching enzyme (HGBE) | 32643_at | 6.5 | 6.1 | 7.1 | 9.3 |
| DP prostanoid receptor (PTGDR) | 31782_at | 6.4 | 6.7 | 3.6 | 4.3 |
| interleukin 2 receptor gamma chain | 1506_at | 6.4 | 4.2 | 4.1 | 4.1 |
| translational inhibitor protein | 32173_at | 6.4 | 5.5 | 4.5 | 4.9 |
| gb=AI800578 | 34728_g_at | 6.4 | 7.7 | 9.2 | 8.1 |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|---|-----------------------------|---|------|---------|------|
| | | (Fold increase compared to Normal PBMC) | | | |
| tudor repeat repeat associator associator with PCTAIRE 2 | 40852_at | 6.4 | 7.0 | 7.7 | 6.8 |
| gb=AL080111 | 34752_at | 6.3 | 3.9 | 7.9 | 7.4 |
| granulocyte colony-stimulating factor induced gene | 37121_at | 6.3 | 4.9 | 4.7 | 1.1 |
| carboxyl terminal LIM domain protein (CLIM1) | 38937 36937_s_at | 6.3 | 6.1 | 4.4 | -1.6 |
| gb=AF091084 | 35329_at | 6.3 | 9.1 | 6.9 | 11.4 |
| gb=AL041683AL041663 | 32662_at | 6.3 | 4.7 | 4.3 | 5.2 |
| gb=AA160055AAI60056 | 40937_at | 6.3 | 4.8 | 5.0 | 12.5 |
| NK receptor (NKp45)(NKp46), isoform d | 34040_s_at | 6.3 | 6.3 | 7.4 | 3.6 |
| serine/threonine protein kinase EMK | 965_at | 6.3 | 6.9 | 6.1 | 8.7 |
| small GTP-binding protein | 40889 40669_at | 6.3 | 5.1 | 5.4 | 2.3 |
| gb=AA576724 | 41648 41646_at | 6.3 | 5.8 | 6.4 | 5.6 |
| RING zinc finger protein (RZF) | 35811_at | 6.3 | 6 | 8.5 | 4.7 |
| KIAA0010 gene | 32044_at | 6.2 | 7.1 | 6.3 | 7.2 |
| TBP-associated factor (hTAFII130) | 142_at | 6.2 | 5.7 | 5.8 | 6.8 |
| gb=AW024285 | 41177_at | 6.2 | 6.3 | 3.7 | 2.6 |
| gb=D50920 | 34289_f_at | 6.2 | 6.2 | 4.4 | 7.6 |
| GARS-AIRS-GART | 38384_at | 6.2 | 7.3 | 8.6 | 7.5 |
| SCA2 | 36998_s_at | 6.2 | 6 | 7.4 | 9.5 |
| sigma 3B | 32030_at | 6.1 | 4.6 | 6.7 | 1.5 |
| KIAA0386 gene | 37112_at | 6.1 | 6.3 | 4.1 | 18.1 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|--|----------------|---|------|---------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| nucleolar protein hNop56 | 34882_at | 6.1 | 5.5 | 4.2 | 11.4 |
| RP105 | 40715_at | 6.0 | 10.1 | 6.0 | 5.2 |
| gb=W28167 | 34404_at | 6.0 | 6.3 | 5.4 | 7.9 |
| MAP kinase kinase kinase 4 (MKK4) | 36910_at | 6.0 | 4.4 | 7.4 | 7.5 |
| eIF4GII | 33907_at | 5.9 | 5.9 | 7.5 | 2.6 |
| WWp2-like mRNA | 33629_at | 5.9 | 6.1 | 5.3 | 2.9 |
| G6PD gene for glucose-6-phosphate dehydrogenase | 38043_at | 5.9 | 3.5 | 4.8 | 9.0 |
| LTG19 | 32400_at | 5.9 | 6.2 | 6.3 | 5.4 |
| KIAA0796 protein | 38113_at | 5.9 | 4.2 | 5.3 | 3.2 |
| interleukin 2 receptor beta chain (p70-75) | 1365_at | 5.9 | 6.5 | 4.8 | 1.1 |
| KIAA0060 gene | 34332_at | 5.8 | 7.8 | 7.9 | 14.5 |
| low density lipoprotein receptor gene | 32855_at | 5.8 | 10.1 | 5.2 | 28.0 |
| Huntington's Huntingtons Disease (HD) | 37767_at | 5.8 | 4.7 | 4.7 | 3.8 |
| monocarboxylate transporter 2 (hMCT2) | 35547_at | 5.8 | 5.1 | 6 | 14.1 |
| DNA from chromosome 19p13.2 cosmids R31240, R30272 and R28549 containign containing the ELKFEKLF, GCDH, CRTG, and RAD23A genes | 1753_a_at_s_at | 5.8 | 3.1 | 8.3 | 4.6 |
| KIAA0053 gene | 38149_at | 5.8 | 5.2 | 9 | 5 |
| Gb=AI143868 | 34816_at | 5.8 | 4.6 | 5.1 | 7.7 |
| serine phosphatase FCP1a (FCP1) | 35979_at | 5.8 | 6.2 | 5.4 | 5.2 |
| similar to cytoplasmic dynein dynein light chain 1 | 31655_at | 5.7 | 7.7 | 6.06.9 | 3.2 |
| KIAA1064 protein | 3688036860_at | 5.7 | 5.2 | 3.1 | 5.9 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|-----------------------|---|------|--------------------|--------------------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| transactivator protein (CREB) | 37535_at | 5.7 | 5.8 | 8.6 | 10.2 |
| Human immune interferon (IFN-gamma) | 1611_s_at | 5.7 | 5.3 | 4.5 | -1 |
| gb=AF052135 | 39391_at | 5.7 | 8 | 7.6 | 9.6 9.7 |
| acylphosphatase acylphosphatase, erythrocyte (CT) isoenzyme | 33334_at | 5.6 | 4.9 | 5.5 | 7.5 |
| hRIF hRIF beta subunit (p102 protein) | 33252_at | 5.6 | 6.0 | 4.2 | 5.2 |
| ABC transporter MOAT-C (MOAT-C) | 41428_at | 5.6 | 6.9 | 8.3 | 9.1 |
| ras GTPase-activating-like protein (IQGAP1) | 1825_at | 5.6 | 6.2 | 6.1 | 4.2 |
| protein tyrosine phosphatase (PTPase-alpha) | 1496_at | 5.6 | 3.8 | 5.2 | 3 |
| retinoblastoma susceptibility | 2044_s_at | 5.6 | 4.4 | 5.6 5.5 | 2.3 |
| KIAA0877 protein | 39021_at | 5.6 | 5.3 | 4.5 | 4.5 |
| translocation T(4:11) of ALL-1 gene to chromosome 4 | 1124_at | 5.5 | 4 | 7.6 | 6.4 |
| osteoclast stimulating factor mRNA | 467_at | 5.5 | 4.9 | 4.4 | 4.1 |
| kinesin-like DNA binding protein | 356_at | 5.5 | 5.1 | 9.2 | 6.5 |
| IkB IkB kinase beta subunit | 35960_at | 5.5 | 4.1 | 5.4 | 9.3 9.9 |
| gb=AW044624 | 41551_at | 5.4 | 5 | 6.6 | 4.6 |
| gb=AA127624 | 33865_at | 5.4 | 3.8 | 4.6 | 6.5 |
| RNA binding protein DEF-3 | 40869_at | 5.4 | 6.0 | 6.8 | 6.7 |
| Protein-protein phosphatase 2A B alpha1 regulatory subunit | 178 176_at | 5.4 | 4.4 | 7.8 | 8.1 6.1 |
| integrin ntegrin beta-7 subunit | 2019_s_at | 5.4 | 5.9 | 3.8 | 5.3 |
| cdc25+ homolog | 1347_at | 5.4 | 4.7 | 3.8 | 10.3 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|-------------------------|---|------|---------------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| Ndr protein kinase | <u>3821736217</u> at | 5.3 | 4.3 | 7.7 | 7.2 |
| KIAA0625 protein | 40083_at | 5.3 | 6.6 | 7.9 | 8 |
| KIAA1012 protein | <u>3800236002</u> at | 5.3 | 6.5 | 8 | 8.3 |
| protein phosphatase 2A Balphal regulatory subunit | <u>4078840786</u> at | 5.3 | 4.2 | 7.2 | 6.3 |
| WD40 protein BING4 | 33250_at | 5.3 | 4.0 | 3.4 | 5.5 |
| serine kinase SRPK2 | 1213_at | 5.3 | 3.3 | 7.7 | 2.2 |
| interferon regulatory factor 3 | 371_at | 5.3 | 4.3 | 5.7 | 5.9 |
| nuclear localization signal containing protein deleted in Velo-Cardio-Facial syndrome (Nivef)(Nlvcf) | 32745_at | 5.2 | 4.9 | 4.4 | 4.4 |
| gb=D45288 | 35310_at | 5.2 | 3.2 | 3.3 | 2.1 |
| gb=AI695103AI698103 | 35993_s_at | 5.2 | 7.4 | 6.3 | 8.6 |
| gb=X95808 | 41046_s_at | 5.2 | 5.7 | 8.3 | 11.3 |
| endo/exonuclease Mre11 (MRE11A) | 32870_g_at | 5.2 | 4.3 | <u>6.95.9</u> | 6.3 |
| beige protein homolog homolog (chs) | 35695_at | 5.2 | 5 | 7.6 | 2.9 |
| gb=AL049703 | 32212_at | 5.1 | 5.2 | 4.0 | 6.4 |
| leucocyte-leucocyte vacuolar protein sorting | 35779_at | 5.1 | 8.4 | 6.3 | 6 |
| programmed cell death- 2/Rp8 homolog | 855_at | 5.1 | 7.3 | 4.3 | 7.8 |
| malate dehydrogenase precursor (MDH) mRNA, nuclear gene encoding mitochondrial protein | 39001_at | 5.0 | 4.5 | 4.6 | 5.2 |
| gb=AL049955 | 34347_at | 5 | 3.3 | 5.5 | 7 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|------------------------------|---|----------------------|---------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=U37012 | 33132_at | 5 | 16.8 | 3.4 | 7.2 |
| gb=D82351 | 31671_at | 5 | 3.9 | 4.2 | 3.2 |
| uracil-DNA glycosylase | 37688 37686_s_at | 5.0 | 3.5 | 5.9 | 5.5 |
| KIAA0011 gene | 36932_at | 5.0 | 4.5 | 5.8 | 7.8 |
| YL-1 protein (nuclear protein with DNA-binding ability) | 33873_at | 5 | 4.2 | 6.7 | 7.1 |
| tRNA synthetase-like protein | 34291_at | 5 | 7 | 6 | 8.2 |
| protein kinase C-binding protein RACK7 | 842_at | 5.0 | 4.9 | 3.8 | 4.6 |
| KIAA0312 gene | 34372_at | 5.0 | 3.7 | 6.7 | 4.7 |
| SF2p33 | 36099_at | 4.9 | 4.6 | 3.7 | 5.0 |
| gb=AB014597 | 39380_at | 4.9 | 3.5 | 3.7 | 4.3 |
| gb=R59697 | 35140_at | 4.9 | 4.1 | 4.6 | 6.4 |
| gb=U36501 | 37354_at | 4.9 | 5.2 | 3.4 | 5.4 |
| ZBP-59 protein | 41465_at | 4.9 | 3.6 | 5.2 | 5.1 |
| ribulose-5-phosphate-epimerase | 37797_at | 4.9 | 4.0 | 7.2 | 9.2 |
| C2f | 39397 39357_at | 4.9 | 5.1 | 4.9 | 6.6 |
| GT335 | 41749_at | 4.9 | 5 | 5.9 | 4.3 |
| Human poly(ADP-ribose) synthetase | 1287_at | 4.9 | 6 | 4.4 | 7.5 |
| KIAA0132 gene | 35322_at | 4.9 | 5.36 3 | 9.3 | 6.2 |
| gb=AF052162 | 41176_at | 4.8 | 4.4 | 3.4 | 1.7 |
| class I histocompatibility antigen-like protein mRNA | 34427-at_g_a t | 4.8 | 3.1 | 4.0 | 4.0 |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|---|-----------------------------|---|------|--------------------|--------------------|
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=AF060862 | 40352_at | 4.8 | 3.9 | 3.3 | 2.6 |
| G4 protein (G4 gene, located in the class III region of the major histocompatibility complex) | 41053_at | 4.8 | 6.1 | 4.7 | 8.2 |
| putative mitochondrial outer membrane protein import receptor (hTOM) | 34345_at | 4.8 | 6.4 | 4.4 | 7.2 |
| nitriliase -nitrilase1 (NIT1) | 39735_at | 4.8 | 3.8 | 7.5 7.6 | 7.1 |
| gb=L13435 | 160024_at | 4.8 | 5.7 | 3.1 | 6.7 |
| gb=L13435 | 33126_at | 4.8 | 4.1 | 6.5 | 5.8 5.6 |
| Smg GDS-associated protein SMAP | 40779_at | 4.8 | 3.9 | 4.4 | 6.3 |
| KIAA0854 protein | 41503_at | 4.7 | 3.4 | 4.3 | 4.2 |
| gb=AA173896 | 34340_at | 4.7 | 9.3 | 6.5 | 8 |
| gb=AA975427 | 31738 31736_at | 4.7 | 4.1 | 4.1 | 4 |
| gb=W27939 | 38658 38656_s_at | 4.7 | 3.6 | 3.9 | 4.3 |
| Human translational initiation factor (eIF-2) | 1154_at | 4.7 | 5.3 | 4 | 2.9 |
| NADP-dependent isocitrate dehydrogenase (IDH) | 39023_at | 4.7 | 8.9 | 12.6 | 5.8 |
| heterochromatin heterochromatin protein p25 | 37304_at | 4.7 | 4.6 | 5.7 | 5.7 |
| mNA -mRNA for small GTP-binding protein | 37466_at | 4.7 | 6.4 | 5.7 5.4 | 6.3 |
| methyl-CpG-binding protein | 34355_at | 4.7 | 4.4 | 4.6 | 5.8 5.6 |
| mRNA for imogen | 40072_at | 4.6 | 4.2 | 4.9 | 6.6 |
| transcription factor NFATx4 | 40823_s_at | 4.6 | 4.5 | 3.1 | 3.9 |
| nexin 1 (SNX1) | 36583_at | 4.6 | 8.5 | 12.3 | 9.8 |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|---|---------------------------------------|---|------|---------------------------|------|
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=U79282 | 32069 <u>32059</u> at | 4.6 | 4.0 | 5.2 | 4.2 |
| gb=A1760162A1760162 | 41058_g_at | 4.6 | 7.3 | 6.0 | 8.6 |
| gb=AA224832 | 39120_at | 4.6 | 5.7 | 9.3 | 9.4 |
| KIAA0648 protein | 34353_at | 4.6 | 3.1 | 5.1 | 6.4 |
| gb=AB007889 | 37383 <u>37363</u> at | 4.6 | 4 | 5.5 | 1.3 |
| homolog of yeast mutL (hPM31)(hPMS1) | 41481 <u>41461</u> at | 4.6 | 3.6 | 4.5 | 5.5 |
| UDP-glucose dehydrogenase (UGDH) | 35214_at | 4.6 | 3.9 | 4 | 6.4 |
| KIAA0560 protein | 41712_at | 4.5 | 4.2 | 5.3 | 6.8 |
| gb=AL060390AL050390 | 31852_at | 4.5 | 3.8 | 3.7 | 3.6 |
| similar to Drosophila Drosophila ash2 | 35804_at | 4.5 | 5.8 | 8.5 <u>6.5</u> | 5.7 |
| gb=A1928387A1928387 | 33225_at | 4.5 | 4.5 | 4.8 <u>4.6</u> | 5.4 |
| SCM-1beta precursor | 31498 <u>31496</u> g_at | 4.5 | 25.9 | 8.2 | 5.7 |
| putative glucosyltransferase | 32051_at | 4.5 | 4.6 | 3 | 5.7 |
| retinoic acid receptor responder 3 (RARRES3) | 33236_at | 4.5 | 4.2 | 4.6 | 1.6 |
| KIAA0350 gene | 34661_at | 4.5 | 5.4 | 3 | 5.1 |
| CACCC box-binding protein | 41466_s_at | 4.5 | 3.1 | 4.3 | 3.9 |
| mutator gene (hMSH2) | 860_at | 4.5 | 5.0 | 3.8 | 13.1 |
| tyrosylprotein sulfotransferase-2 | 35172_at | 4.5 | 5 | 4.2 | 3 |
| DNA polymerase gamma | 1014_at | 4.4 | 3.5 | 4.6 | 4 |
| DORA protein | 34946_at | 4.4 | 14.8 | 13.2 | -3.0 |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|--|----------------------------|---|------|--------------------|------|
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=A1246728A1246726 | 37046_at | 4.4 | 4.3 | 3.8 | 5.9 |
| galactokinase (GK2) | 37825_at | 4.4 | 3.7 | 4.7 | 3.4 |
| gb=AW051579 | 33191_at | 4.4 | 4.2 | 3.6 | 4.5 |
| Heat shock-shock protein 70 testis variant | 40656_at | 4.4 | 5.0 | 4.1 | 5.9 |
| gb=AA142942 | 33399_at | 4.4 | 5.3 | 4.3 | 4.6 |
| gb=U26710 | 35832 35632_at | 4.4 | 3.1 | 5.0 5.4 | 7.4 |
| stress-activated protein kinase 4 | 33245_at | 4.4 | 3.8 | 4.0 | 3.3 |
| ST15 | 35234_at | 4.3 | 3.3 | 3.9 | 6.2 |
| villin-like protein | 37123_at | 4.3 | 3.4 | 4.1 | 3.6 |
| gb=U79255U79256 | 37677 37577_at | 4.3 | 3.2 | 4.7 | 2.5 |
| gb=L13744 | 35975_at | 4.3 | 3.4 | 5.9 | 8.3 |
| gb=AL049701 | 34446_at | 4.3 | 3.3 | 5.1 | 2 |
| FIP2 alternatively translated | 41743-1 at_i_at | 4.3 | 4.3 | 4.9 | 4.3 |
| NF-AT4c | 40822_at | 4.3 | 4.1 | 4.5 | 3.9 |
| putative poly(ADP-ribosyl) transferase (PARPL) | 37303_at | 4.3 | 4.4 | 4.9 | 4.6 |
| KIAA0373 gene | 38135_at | 4.3 | 3.8 | 5.4 | 5.8 |
| gb=W26640 | 35357_at | 4.3 | 4 | 3.4 | 9.3 |
| SCM-1beta precursor | 31495_at | 4.2 | 31.5 | 8.8 | 8.1 |
| gb=D87077 | 38892_at | 4.2 | 3.9 | 5.1 | 4.1 |
| mitochondrial RNA polymerase | 40232_at | 4.2 | 3.5 | 5.3 | 4.7 |
| gb=AA780049 | 40615_at | 4.2 | 4.1 | 5.4 | 3.2 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|-------------------------------|---|-----------------------|-------------------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=AA905543 | 38620_at | 4.2 | 5.0 | <u>4.84.6</u> | 2.7 |
| (AF1q) | 36941_at | 4.2 | 4.0 | 5.1 | 11.1 |
| KIAA0018 gene | 38658 36658_at | 4.2 | 5.9 | 3.1 | 4.7 |
| platelet activating receptor homolog (H963) | 31919_at | 4.2 | 3.4 | 13.9 | 9.9 |
| SET-binding protein (IEF-SP 3521)(SEB) | 34990_at | 4.2 | 4.3 | 6.2 | 1.3 |
| transformation sensitive protein (IEF SSP 3521) | 207_at | 4.2 | 8.3 | 3.6 | 6.6 |
| protein-tyrosine phosphatase | 14801 1460_g_at | 4.2 | 4.2 | 6.4 | 4.1 |
| (GalT3 (beta3-Galactosyltransferase)) | 35944_at | 4.1 | 3.9 | 5.4 | 3.5 |
| Arp2/3 protein complex subunit p16-Arc (Arc15)(Arc16) | 38392_at | 4.1 | 3.8 | 3.7 | 3.9 |
| nuclear receptor co-repressor N-CoR | 39722_at | 4.1 | 5.1 | 6.1 | 4.2 |
| gb=AA808981AA808961 | 38287_at | 4.1 | 5.2 | 4.4 | 2.3 |
| transcription factor ISGF-3 | AFFX-HUMISGF 3A/M9793 5_3_at | 4.1 | 5.2 | 7.3 | 2.7 |
| Jak2 kinase | 37468_at | 4.1 | 6.15. 1 | 5.5 | 3.5 |
| transcription factor ISGF-3 | AFFX-HUMISGF 3A/M9793 5_MA_at | 4.1 | 3.9 | 6.9 | 1 |
| 24p21-activated protein kinase (Pak1) | 1558_g_at | 4.1 | 6.9 | 6.15.1 | -1.5 |
| gb=D79985 | 33889_s_at | 4.1 | 3.8 | 4.6 | 7.1 |
| gb=AB002347 | 39797_at | 4.1 | 4.5 | 7.1 | 8.1 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|--|-----------------|---|------|---------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=D79998 | 34858_at | 4.1 | 3.8 | 4.7 | 8.8 |
| short form transcription factor C-MAF (c-maf) | 4150641505_r_at | 4.1 | 4.8 | 3.1 | 2.6 |
| gb=AW051579 | 33192_g_at | 4.1 | 5.2 | 5.7 | 5.8 |
| lycosylphosphatidyl inositol-anchored protein GPI-80 | 34498_at | 4.1 | 3.7 | 11.2 | 1.6 |
| DNA helicase (RECQL) | 34684_at | 4.1 | 5.2 | 7 | 8.6 |
| KIAA0838 protein | 34719_at | 4.1 | 4 | 6.2 | 7.4 |
| SKAP55 | 38862_at | 4.1 | 3.3 | 4.3 | 2.2 |
| Sel-1 like mRNA | 40689_at | 4 | 3.4 | 3.6 | 3.4 |
| c-myc binding protein | 1904_at | 4 | 5.3 | 3.4 | 4.1 |
| T-cell receptor alpha chain C region | 432_s_at | 4 | 5.1 | 3 | 4.8 |
| calcium activated neutral protease large subunit (muCANP, calpain, EC 3.4.22.17) | 33908_at | 4 | 5.5 | 3.9 | 3.5 |
| uridine diphosphoglucose diphosphoglucose pyrophosphorylase | 37373_at | 4 | 3.6 | 3.7 | 3.7 |
| SH2D1A | 38147_at | 4 | 3.4 | 4.4 | 3.9 |
| gb=AL035295AL035296 | 37119_at | 4.0 | 3.4 | 6.4 | 5.3 |
| gb=AF070595 | 38170_at | 4.0 | 3.0 | 4.2 | 6.5 |
| gb=H05692 | 35283_at | 3.9 | 4.0 | 5.4 | 5.4 |
| gb=AI540318 | 41234_at | 3.9 | 3.5 | 5.5 | 3.4 |
| gb=X79882 | 38064_at | 3.9 | 4.7 | 3.3 | 2.3 |
| GAP binding protein p62dok (DOK) | 815_at | 3.9 | 5.3 | 6.9 | 3.7 |
| OPA-containing protein | 40998_at | 3.9 | 4 | 4.1 | 5.4 |
| myogenic determining factor 3 (MYOD1) | 33482_at | 3.9 | 4.0 | 4.2 | 4.9 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|---------------------------|---|------|---------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=AA293354AA203354 | 38981_at | 3.9 | 6.2 | 3.7 | 5.7 |
| gb=AF006083 | 35271_at | 3.9 | 3.4 | 3.1 | 3.2 |
| ICAM-2 | 38454_g_at | 3.9 | 6.4 | 3 | 5.7 |
| protein-tyrosine phosphatase | 1459_at | 3.9 | 3.2 | 5.9 | 3.7 |
| T -lymphocyte specific protein tyrosine kinase p56lck (lck) abberant mRNA | 33238_at | 3.9 | 3.6 | 3.7 | 4.7 |
| zinc finger protein | 39261_at | 3.9 | 4.0 | 6.7 | 7.4 |
| KIAA0097 gene | 37293_at | 3.8 | 3.4 | 5.4 | 4.3 |
| cytosolic acetoacetyl-coenzyme-coenzyme A thiolase | 34790_at | 3.8 | 3.1 | 3.2 | 6.8 |
| NF-AT4c | 250_at | 3.8 | 3 | 4 | 2.7 |
| gb=X77744 | 32883_at | 3.8 | 4 | 6.1 | 5.4 |
| gb=Y08614 | 37729_at | 3.8 | 3.9 | 4.5 | 3.8 |
| transcription factor WSTF | 32261_at | 3.8 | 4.4 | 5 | 5.5 |
| TATA-binding protein mRNA | 41441_at | 3.8 | 3.2 | 4.6 | 7.3 |
| KIAA0543 protein | 41077_at | 3.8 | 4.6 | 5.5 | 12.7 |
| lymphocyte-specific protein tyrosine kinase (lck) | 2059_s_at | 3.7 | 3.9 | 4.1 | 4.7 |
| CHD5 protein | 32777_at | 3.7 | 3.3 | 6.7 | 5.4 |
| KIAA0549 | 4008440064 _at | 3.7 | 4 | 3.3 | 4.9 |
| leukemia associated gene 1 | 33791_at | 3.7 | 5.4 | 3.1 | 3.9 |
| DM33Diff33 | 37007_at | 3.7 | 3.9 | 4.6 | 5.6 |
| branched chain alpha-ketoacid dehydrogenasekinase precursor | 32828_at | 3.7 | 3.2 | 7.6 | 2.9 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|--|---------------------------|---|----------------------|---------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| gb=AL022398 | 40720_at | 3.7 | 3.63 8 | 3.1 | 5.4 |
| KIAA0748 KIAA0746 protein | 41585_at | 3.7 | 3.5 | 5.5 | 3.6 |
| gb=AL050018 | 46875 36875_at | 3.7 | 5.2 | 3.2 | 4.8 |
| gb=D25538 | 40585_at | 3.7 | 4.3 | 3.8 | 1.9 |
| gb=X84908 | 37392_at | 3.7 | 3.9 | 5.9 | 2.9 |
| /gb=X70478X70476 | 36877 36677_at | 3.6 | 3.8 | 4.8 | 4.4 |
| Interleukin1 interleukin 1-beta converting enzyme isoform beta (IL1BCE) | 39320_at | 3.6 | 3.16 6 | 3.1 | -1.8 |
| Rad50 | 1533_at | 3.6 | 3.73 4 | 3.7 | 3.6 |
| snRNA activating protein complex 190kD subunit (SNAP190) | 35092_at | 3.6 | 3.96 6 | 3.9 | 6.4 |
| gb=AI655015 | 39932_at | 3.6 | 5.6 8 | 5 | 6.2 |
| TGF-beta activated kinase 1a | 36905_at | 3.6 | 5.13 6 | 5.1 | 7 |
| TAFII20 | 802_at | 3.6 | 5.14 0 | 5.1 | 4.9 |
| gb=AA203246 | 41821_at | 3.6 | 4.84 1 | 4.8 | 4.2 |
| KIAA0039 gene | 37646_at | 3.6 | 5.13 0 | 5.1 | 3.2 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|---------------|---|----------------------|---------|------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| KIAA0494 | 41830_at | 3.5 | 3.43 8 | 3.4 | 4.3 |
| gb=AI547262 | 33875_at | 3.5 | 3.33 1 | 3.3 | 2 |
| gb=AC002310 | 40905_at | 3.5 | 7.54 0 | 7.5 | 4.0 |
| MHC class III HSP70-2 gene (HLA) | 31692_at | 3.5 | 5.18 2 | 5.1 | 4.3 |
| T-cell surface antigen CD2 (T11) | 40738_at | 3.5 | 4.2 | 4.2 | 3.5 |
| tob family | 39286_at | 3.5 | 5.93 3 | 5.9 | 5.8 |
| phosphoribosypyrophosphate phosphoribosypyrophosphate synthetase-associated protein 39 | 37338_at | 3.5 | 4.34 6 | 4.3 | 6.9 |
| P-selectin glycoprotein ligand (SELPLG) | 37541_at | 3.5 | 3.13 2 | 3.1 | 3.2 |
| leupaxin | 36062_at | 3.5 | 4.73 4 | 4.7 | 5.5 |
| KIAA0992 protein | 41191_at | 3.5 | 3.6 | 6.5 | -1.5 |
| gb=W22296 | 36957_at | 3.4 | 3.1 | 3.4 | 3 |
| protoporphyrinogen protoporphyrinogen oxidase | 37098_at | 3.4 | 3.7 | 4.2 | 8.2 |
| prolyl oligopeptidase | 37950_at | 3.4 | 3.6 | 4.7 | 2.4 |
| Toll/interleukin-1 receptor-like protein 3 (TILS)(TIL3) | 34473_at | 3.4 | 4.0 | 7.2 | 2.4 |
| class-I class-I MHC-restricted T cell associated molecule (CRTAM) | 36389_at | 3.3 | 11.8 | 9.4 | 12.5 |

Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95)

| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
|---|---------------------------|---|------|--------------------|------|
| | | (Fold increase compared to Normal PBMC) | | | |
| meningioma-expressed antigen 6 (MEA6) | 41615_at | 3.3 | 4.3 | 5.4 | 6.6 |
| HMED7 hMed7 (MED7) | 36648_at | 3.3 | 3.1 | 5.1 | 6.9 |
| acetyl-coenzyme A transporter | 346663 4668_at | 3.3 | 3.1 | 4.4 | 3.7 |
| KIAA0241 gene | 39761_at | 3.3 | 4.8 | 7.1 | 7.7 |
| gb=U00948U00946 | 32185_at | 3.3 | 3.6 | 4.8 4.6 | 3.4 |
| gb=X53390 | 38794_at | 3.3 | 4 | 3.2 | 6.1 |
| Kruppel-type zinc finger protein | 35588_at | 3.3 | 3.3 | 6.5 | 11.8 |
| gb=AL050159 | 38717_at | 3.3 | 5.5 | 4.2 | -4.7 |
| protein-tyrosine phosphatase 1C | 794_at | 3.3 | 5.4 | 3.23 3 | 1.1 |
| DAP-kinase mRNA | 40049_at | 3.3 | 5.8 | 9.4 | -2.1 |
| KIAA1105 protein | 33457_at | 3.3 | 4.8 | 5.2 | 5.4 |
| son-a | 39097_at | 3.3 | 3.5 | 4 | 4.6 |
| neutral amino acid transporter B mRNA | 411784 1778_at | 3.3 | 4.2 | 3.4 | 2.8 |
| candidate tumor suppressor gene 21 protein isoform +I mRNA | 40498_g_at | 3.2 | 3 | 3.63 5 | 2.3 |
| KIAA0453 protein | 32743_at | 3.2 | 3.0 | 4.54 6 | 6.6 |
| gb=AL060133AL080133 | 41815_at | 3.2 | 4.3 | 5.5 | 4.7 |
| DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 genes | 41184_at_s_at | 3.2 | 3.5 | 3 | 2.2 |
| 2,4-dienoyl-CoA reductase gene | 38104_at | 3.2 | 4.8 | 3.4 | 3.3 |
| gb=AF055024 | 31875_at | 3.2 | 3.3 | 4.4 | 4.9 |
| KIAA0088 KIAA0068 gene | 37306_at | 3.2 | 7.9 | 11.6 | -1.7 |

| Table 2. Genes upregulated in LGL1, LGL2 and LGL3/RA (Affymetrix U 95) | | | | | |
|---|-----------------------------|---|----------------------|----------------------|----------------------|
| Gene Name | Accession No. | LGL1 | LGL2 | LGL3/RA | CD8+ |
| | | (Fold increase compared to Normal PBMC) | | | |
| mitochondrial 3-oxoacyl-CoA thiolase | 41530_at | 3.2 | 4.2 | 3.2 | 2.5 |
| replication protein A 70kDa | 38481_at | 3.2 | 3.2 | 3.1 | 4.6 |
| Human Interferon-gamma induced protein (IFI 16) gene | 1456_s_at | 3.1 | 3.63 5 | 6 | 3.1 |
| VHL binding protein-1 (VBP-1) | 171_at | 3.1 | 3.6 | 3 | 4.64 5 |
| butyrophilin (BTF5) | 32629_f_at | 3.1 | 3.6 | 5.35 2 | 3 |
| gb=A1966201A1986201 | 35787_at | 3.1 | 4.3 | 5.1 | 7.1 |
| gb=AL050275 | 39115_at | 3.1 | 3.7 | 4.4 | 8.1 |
| gb=AI478147 | 4065340853 at | 3.1 | 4.1 | 4.8 | 1.7 |
| gb=AB028960 | 40829_at | 3 | 6.7 | 6.7 | 7.5 |
| gb=AL049435 | 38510_at | 3.0 | 4.5 | 9.0 | 1.2 |
| gb=AL080115 | 39442_at | 3 | 3.7 | 6.3 | 4.6 |
| Human phosphatase 2A | 924_s_at | 3 | 3.8 | 3.2 | 5 |
| WNT7a | 3578336763 at | 3 | 4.5 | 4.4 | 10.0 |
| Skeletal -skeletal muscle abundant protein | 32655_s_at | 3.0 | 3.2 | 6.0 | 7.7 |
| Gb=R59608R59606 | 41302_at | 3 | 3.4 | 3.9 | 3.5 |
| Gbgb=AF070590 | 40760_at | 3.0 | 3.7 | 4.1 | 2.1 |
| Phosphatidylinositol-4-phosphate 5-kinase type II beta | 35741_at | 3 | 3.8 | 3.9 | 5.4 |
| KIAA0541 protein | 41430_at | 3 | 3.4 | 4.6 | 3.7 |
| FIP2 alternatively translated | 41742_s_at | 3 | 3 | 3.3 | 3.2 |

Table 3. Genes that are down-regulated in LGL leukemia patients when compared to normal (Affymetrix U 95)

| Name of the Gene | Accession No. | LGL 1 | LGL 2 | LGL3/RA |
|--|-----------------------------------|-------|------------------------------|-----------------|
| 1. KIAA0508 | 33581 <u>33591</u> _at | -2.8 | -24.8 | -23.7 |
| 2. retinal short-chain dehydrogenase/reductase retSDR1 | 40782_at | -1.4 | -17.1 | -10 |
| 3. KIAA0414 | 41695_at | -2.7 | -13.1 | -8.6 |
| 4. hypothetical protein FLJ10097 | 40916_at | -1.3 | -10.6 <u>10.5</u> | -8.6 |
| 5. KIAA0552 | 38248_at | 1.9 | -9.7 | -11.7 |
| 6. integrin alpha 6 subunit | 39753_at | -2.1 | -9.4 | -5.3 |
| 7. KIAA0172 | 37225_at | -2.2 | -9.1 | -8.6 |
| 8. two-handed zinc finger protein ZEB | 33440_at | 1.5 | -7.9 | -8.0 |
| 9. sterol-C5-desaturase | 33421_s_at | -2.4 | -7.6 | -10.0 |
| 10. nuclear factor RIP140 | 40088_at | -2.2 | -6.9 | -4.6 |
| 11. SCML2 protein | 38518_at | -2.1 | -5.8 | -5.3 |
| 12. receptor protein-tyrosine kinase (HEK8) | 1606_at | 3.5 | -5.5 | -4.8 |
| 13. hSGT1 | 33746_at | -2.9 | -5.5 | -5.4 |
| 14. gb=AL080144 | 35672_at | -2.4 | -5 | -7 |
| 15. Dr1-associated corepressor (DRP1)(DRAP1) | 39077_at | -1 | -4.9 | -14.7 |
| 16. collagen binding protein 2 | 39166_s_at | -2.5 | -4.7 | -7.4 |
| 17. CD44 isoform RC (CD44) | 31472_at_s_at | -2.3 | -4.6 | -4.6 |
| 18. USF2 | 38324_at | 2.5 | -4.5 | -5.0 |
| 19. G protein-coupled receptor (EBI 1) gene exon 3 | 1097_s_at | 3 | -4.1 | -5.4 |
| 20. serine/threonine kinase receptor-2-3 (SKR2-3) | 34055_at | -2.2 | -4.0 | -3.9 |
| 21. gb=AC002073 | 36231_at | -2.2 | -4 | -12.8 |
| 22. nel-related protein 2 | 32598_at | 4.1 | -3.9 | -5.3 |
| 23. transducin-like enhancer protein (TLE3) | 38234_at | -2.4 | -3.9 | -3.2 |
| 24. DNA binding protein (SATB1) | 38899 <u>36899</u> _at | 1.5 | -3.8 | -4.7 |
| 25. KIAA0443 | 37446_at | 1.7 | -3.8 | -4.8 |
| 26. HSPNP | 430_at | -1.2 | -3.7 | -3 |

| | | | | |
|--|-------------------|-------------|-------------|-------------|
| 27. <u>GBgb=AF052160</u> | <u>34962_at</u> | <u>-1.7</u> | <u>-3.7</u> | <u>-9.6</u> |
| 28. LIM protein SLIMMER | <u>32542_at</u> | <u>-1.1</u> | <u>-3.7</u> | <u>-4.8</u> |
| 29. calponin | <u>40953_at</u> | <u>2.9</u> | <u>-3.7</u> | <u>-3.6</u> |
| 30. KIAA0346 | <u>41386_i_at</u> | <u>-2.2</u> | <u>-3.7</u> | <u>-4.1</u> |
| 31. nuclear factor kappa-B DNA binding subunit (NF-kappa-B) | <u>1378_g_at</u> | <u>-2.3</u> | <u>-3.4</u> | <u>-4.1</u> |
| 32. You paraneoplastic antigen (CDR2) | <u>36190_at</u> | <u>-1.2</u> | <u>-3.3</u> | <u>-5.8</u> |
| 33. cell surface glycoprotein CD44 (CD44) gene, 3 end of long tailed isoform | <u>1125_s_at</u> | <u>-2.7</u> | <u>-3.1</u> | <u>-3.4</u> |
| 34. Death Receptor 3 (DR-3, WSL-S1, Apo-3) | <u>41189_at</u> | <u>2.3</u> | <u>-3</u> | <u>-3.8</u> |
| 35. gb=AL049365 | <u>34788_at</u> | <u>1.2</u> | <u>-3</u> | <u>-7.6</u> |